

SOUTH AUSTRALIA.

Annual Report

OF

The Central Board of Health

FOR THE

Year Ended 31st December, 1936.

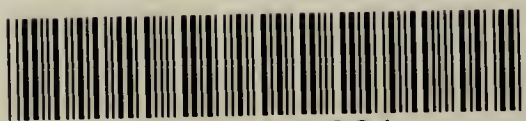
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THE PUBLIC HEALTH.

Annual Report of the Central Board of Health to the Minister of Health (Sir George Ritchie, K.C.M.G.)

SIR—We have the honour to submit the annual report for the year ended 31st December, 1936, on the work of the Central Board of Health of South Australia.

PART I.

GENERAL REVIEW OF ACTIVITIES.

Personnel of the Board.—The personnel of the Board during the year was :—

Chairman—

Albert Ray Southwood, E.D., M.D., M.S., M.R.C.P., F.R. San. I.

Members appointed by the Government—

Edward Angas Johnson, V.D., M.D., M.R.C.S., L.R.C.P., F.R. San. I.

John Burton Cleland, M.D., Ch. M.

Member elected by Metropolitan Local Boards—

Harry Sumner Hatwell, J.P.

Member elected by country Local Boards—

Frank Charles Lloyd, V.D., J.P.

Board Meetings.—Twenty-seven meetings of the Board were held during the year. The routine work of the Board and of the associated Department shows steady increase in amount and in scope. From time to time fresh problems arise ; some of the special subjects dealt with by the Board are reviewed in appropriate portions of this report.

Staff of the Department.—The rapidly widening field of public health work continues to make heavy calls on the staff, and the demands have been met with ready enthusiasm.

Scope of the Work.—The Board acts as a supervisory body over all Local Boards of Health throughout the State. The supervisory work is supplemented by an active policy of inspection and advice. The aim of the Central Board is to assist in every way possible any Local Boards requiring its aid in administrative and technical problems.

The following list indicates some of the routine inspections made by the Inspectors on the staff of the Central Board during the year :—Slaughterhouses, 145 ; butcher shops, 124 ; bakehouses, 88 ; hotels, 120 ; business premises, 1,189 ; private premises, 1,515 ; septic tanks, 408 ; plans of septic tanks examined, 362 ; milk vendors' premises, 242 ; dealers in poisons, 340 ; schools, halls, institutes, &c., 131 ; food premises, 956 ; spirits tested, 352 ; exhumations and reburials attended, 13 ; workmen's camps, 9.

Inspectors of the Central Board of Health made special investigations into various health matters. The subjects included " controlled " tipping of refuse ; disposal of waste waters at Naracoorte and at Clare ; disposal of second-hand building material from the old infectious diseases block, Adelaide ; pollution of Blackwood Creek, Blackwood ; endemic typhus fever at Thebarton, Hindmarsh and Walkerville ; care and education of deaf and dumb children ; diphtheria at Blackwood and Eden ; scarlet fever at Reynella ; typhoid fever at Spalding, Kadina District, and Railway Construction Camps ; and shacks at the Outer Harbour.

Various matters relating to food and drugs were also inquired into. Some of the subjects that received attention were eggs rejected for export ; site for a butter factory at Penola ; cleansing and cooking of tripe ; proposed establishment of a bacon and butter factory at Strathalbyn ; and butter containing foreign fat.

Visits to Local Boards.—From time to time visits are made by officers and members of the Central Board to some of the Local Boards.

At the invitation of the Murray Lands District Councils' Association, representatives of the Central Board attended the half-yearly meeting of the Association held at Meningie on 5th February, 1936. The Chair was occupied by the President of the Association (Mr. J. H. Strangman). The Councils represented

were Waikerie, Loxton, Meningie, Brown's Well, Karoonda, Mobilong, Marne, Lameroo, and Peake. Addresses were given by the Central Board representatives on the various aspects of public health and a discussion followed.

An invitation was also accepted from the Local Board for Enfield for representatives of the Central Board to attend one of its meetings. A general discussion was held on various aspects of health administration. A similar visit was also made by these representatives to a meeting of the Prospect Local Board.

In continuation of the policy of the Central Board of keeping in touch with Local Boards, representatives of the Board visited certain northern centres in September. At Jamestown the Local Boards for the Town of Jamestown, the District of Jamestown and the District of Hallett were represented. Visits were also paid to Melrose, Wilmington and Port Augusta, where conferences were held with various members and officers of those Local Boards.

The Central Board is confident of the high value of these conferences in promoting enthusiasm in the work and removing any possible basis for misunderstandings.

"Public Health Notes".—*"Public Health Notes"* issued quarterly by the Central Board of Health completed its fifth year of publication. This small bulletin has done good work. It has been a useful means for informing members and officers of Local Boards on current matters of public health interest. It has stimulated enthusiasm in community hygiene. It has promoted a wider and modern outlook on public health work.

From time to time articles from Local Board members and officers have been published, and in this way the bulletin has been a medium for the interchange of ideas between Local Boards. There would be great advantage in extending this feature. Suitable articles are always acceptable, and by publishing their experiences in dealing with health problems Local Boards would render each other valuable mutual assistance.

Legislation.—The Board is charged with the duty of administering The Health Act, 1935, The Food and Drugs Acts, 1908-1934, and The Early Notification of Births Act, 1926.

The following legislative amendments were made during the year :—

Adulteration of Wine and Brandy Act, 1907.—The administration of the Adulteration of Wine and Brandy Act, 1907, was formerly under the control of the Attorney-General. On 9th April, 1936, a proclamation was issued appointing the Chief Secretary, the Ministerial Head of the Central Board of Health, to administer the Act. This change was effected because it was considered advisable that the enforcement of this Act, as well as of the Food and Drugs Acts, should be committed to the same Minister.

Poisons.—Amendments to the Regulations relating to the Sale of Poisons have been considered, and revised regulations have been drafted accordingly.

Dangerous Drugs.—Draft regulations have been prepared under the recently enacted Dangerous Drugs Act with the view to carrying out all the purposes of that Act.

Private Hospitals and Maternity Homes.—The "conditions" on which licences for Private Hospitals and Maternity Homes are granted have been reviewed with the object of introducing necessary amending and additional conditions. A draft has been prepared and is now being finalised.

Federal Health Council.—Two meetings of the Council were held during the year. The Ninth Session was held in Canberra in April, 1936. This State was represented by the Chairman of the Central Board of Health. Resolutions were passed on the following subjects :—Maternal Mortality ; Coronial Inquiry into Maternal Deaths ; Prevention and Treatment of Crippling Conditions ; Alleged Cures for Serious Diseases invented by unqualified persons ; Leprosy ; Subsidy for Public Health Purposes and Review of Constitution and Functions of Federal Health Council ; Biological Preparations ; Control of Diphtheria ; Control of Remedies ; Control in Sale of Contraceptives ; Sausage Casings ; Defective Conditions Associated with Defective Foods ; and Travelling Scholarships.

The Tenth Session was held in Perth in September, 1936. Professor J. B. Cleland represented the State as substitute for the Chairman of the Central Board of Health. The following matters were discussed and were the subject of special resolutions :—Legal Control of Medical Practice ; Prevention of the Spread of Psittacosis ; Control in Sale of Contraceptives ; Leprosy ; Conditions Affecting the Deaf, Dumb and Blind ; Manufacture of Catgut in Australia ; Control of Swimming Pools ; Consultative Cancer Clinics ; and Maternal Deaths.

The constitution of the Federal Health Council has now been altered, and its functions are merged in the National Health and Medical Research Council. In addition to the representatives of the Commonwealth Health Department and Heads of the Health Departments of the States, there is one representative from each of the following bodies :—The British Medical Association ; the Royal Australasian College of Surgeons ; the Association of Physicians ; and the Australian Universities having Medical Schools. A lay-man and a lay-woman are also appointed by the Commonwealth Government as members of the new Council.

PART II.
VITAL STATISTICS.

Correction of Statistical records.—Any seeming discrepancies in the figures for the year 1935 shown in this report compared with our previous report are to be attributed to corrections made by the Government Statist (Mr. A. W. Bowden, A.I.A.). The original figures made available at the end of each year are subjected to careful revision by the staff of the Statistical Department, and necessary corrections are made.

The figures here reproduced have been made available by the Government Statist. They show the trends in the State from the public health standpoint.

Population of the State.—In 1936 the natural increase (the excess of births over deaths) was 3,447. Table I shows the population of the State in the years indicated.

TABLE I.
Population of South Australia in various years since 1900.

Year.	Males.	Females.	Total.
1900	180,349	176,901	357,250
1905	181,467	181,154	362,621
1910	206,557	200,311	406,868
1915	220,967	225,018	445,985
1920	245,300	245,706	491,006
1925	276,266	270,792	547,058
1930	288,618	285,849	574,467
1931	289,397	287,682	577,079
1932	290,254	289,039	579,293
1933	291,722	290,955	582,677
1934	292,519	291,775	584,294
1935	293,650	292,793	586,443
1936	294,807	294,505	589,312

Births and Deaths.—Table II. shows the number of births and deaths, and the rate per 1,000 of mean population, and the number of infantile deaths (under the age of one year) and the rate per 1,000 births.

TABLE II.
Births and Deaths in South Australia.

Period.	Births.		Deaths.			
	No.	Rate.	Total.		Infants.	
			No.	Rate.	No.	Rate.
Mean—						
1920–24.....	11,857	23·43	4,901	9·68	693	58·45
1925–29.....	11,301	20·16	5,034	8·98	526	46·54
1930–34.....	8,989	15·54	5,001	8·65	342	38·05
Year—						
1930.....	9,984	17·42	4,851	8·46	483	48·38
1931.....	9,079	15·77	4,888	8·49	330	36·35
1932.....	8,521	14·74	4,957	8·58	312	36·62
1933.....	8,900	15·32	4,904	8·44	286	32·14
1934.....	8,459	14·50	5,403	9·26	301	35·58
1935.....	8,270	14·14	5,163	8·83	289	34·95
1936.....	8,911	15·17	5,464	9·30	277	31·09

Infantile Deaths.—In most civilised countries there has been a striking fall in the infantile death-rate in recent years. In South Australia the rate for 1936 is less than one-third of the rate in 1901. For every three babies under one year dying in 1901, now only one death occurs. The Government Statist, in Bulletin No. 3 of 1937, has noted that there was in 1936 a decrease of 12 in the number of deaths of infants under one year of age, the numbers being 277 (289). The figures in parentheses are for 1935. The death-rate of 31·09 (34·95) per 1,000 births is believed to be a world record, the previous lowest being 31·22 for New Zealand in 1932. The infantile death-rate in this State is less than half the rate 20 years ago, and only about one-third of the rate around 1900.

Under one week the deaths were 153 (159), one week and under one month 32 (38), one-five months 50 (52), six-eleven months 42 (40).

The chief causes of infantile deaths were :—Premature birth 89 (101) ; congenital malformations 41 (40) ; injury at birth 29 (15) ; congenital debility 22 (15) ; other disease of infancy 22 (23) ; diarrhoea and enteritis 11 (7) ; pneumonia 27 (34) ; whooping cough 3 (14).

Table III. is reproduced from Australian Demography, Bulletin No. 53 (Commonwealth Publication) ; and illustrates the steady fall in the infantile death-rate in all States of the Commonwealth.

TABLE III.

Rates of Infantile Mortality per 1,000 Total Births Registered, 1901 to 1936.

Year.	New South Wales.	Victoria.	Queens-land.	South Australia.	Western Australia.	Tasmania.	Northern Territory.	Federal Capital Territory.	Australia.
1901	103.74	102.94	101.94	100.12	128.89	89.05	62.50	—	103.61
1902	109.74	108.60	100.17	93.76	142.01	79.06	200.00	—	107.15
1903	110.35	106.40	119.88	96.76	141.22	110.83	181.82	—	111.36
1904	82.42	77.92	76.13	70.00	113.02	90.70	212.12	—	81.77
1905	80.55	83.30	75.52	72.80	104.19	80.65	111.11	—	81.76
1906	74.53	92.92	74.68	75.66	110.00	91.32	160.00	—	83.32
1907	88.46	72.60	77.65	66.23	97.51	82.97	185.19	—	81.06
1908	75.20	86.05	70.67	69.50	84.72	75.16	58.82	—	77.78
1909	73.87	71.36	71.50	60.91	78.01	64.91	111.11	—	71.56
1910	74.71	76.88	62.90	70.21	78.18	101.68	200.00	—	74.81
1911	69.46	68.70	65.36	60.60	76.01	73.39	96.77	(a) 33.34	68.49
1912	71.00	74.48	71.73	61.68	82.06	66.80	121.21	76.92	71.74
1913	77.78	70.53	63.35	69.93	70.30	70.68	115.38	22.73	72.21
1914	69.29	78.27	63.93	75.79	68.12	71.46	51.72	—	71.47
1915	67.67	68.78	64.33	67.04	66.54	72.37	65.57	42.55	67.52
1916	67.15	74.63	70.27	73.21	66.22	74.97	40.54	15.87	70.33
1917	56.93	56.82	53.87	53.06	57.09	52.27	43.48	45.45	55.91
1918	59.02	61.75	56.66	51.25	57.13	60.80	28.57	20.41	58.57
1919	71.83	67.90	71.88	64.01	61.12	64.97	66.04	111.11	69.21
1920	69.41	73.70	63.24	67.34	66.02	65.51	190.48	66.67	69.14
1921	62.56	72.55	54.16	65.48	78.26	78.02	63.29	74.07	65.73
1922	53.60	53.35	50.38	47.50	55.59	55.70	57.14	31.25	52.74
1923	60.68	65.70	53.95	60.30	56.02	57.45.	13.89	—	60.54
1924	58.93	61.32	51.30	51.33	49.87	54.99	35.09	48.78	57.08
1925	54.95	56.98	45.21	46.09	56.57	55.19	30.77	106.38	53.40
1926	57.61	55.68	50.65	44.33	49.27	46.71	68.49	53.33	53.99
1927	54.94	56.05	54.45	53.43	45.86	52.97	102.94	(b) 142.85	54.47
1928	54.77	55.63	45.54	47.51	48.14	63.95	60.24	(b) 83.33	52.96
1929	56.44	47.23	46.03	40.88	56.13	53.16	18.87	(b) 19.61	51.10
1930	49.84	46.61	39.97	48.38	46.74	50.56	70.42	(b) 24.39	47.24
1931	43.48	44.47	36.67	36.35	41.53	45.99	83.33	(b) 37.27	42.14
1932	40.98	43.00	40.19	36.62	44.57	41.19	75.95	(b) 19.87	41.30
1933	39.35	40.43	42.74	32.13	36.83	41.07	94.59	(b) 45.80	39.52
1934	46.36	44.63	40.61	35.58	40.89	42.28	68.18	(b) 7.46	43.59
1935	39.44	41.17	37.26	34.95	40.15	51.84	83.33	(b) 47.30	39.78
1936	—	—	—	31.09	—	—	—	—	—

(a) Part of New South Wales prior to 1911.

(b) Based on deaths of infants born in Federal Capital Territory only.

Causes of Deaths.—The principal causes of deaths and the rates per 10,000 of mean population are shown in Table IV.

TABLE IV.

Illustrating the Main Causes of Death in South Australia in recent Years. (Compiled from Figures supplied by the Government Statist.)

Disease.	Persons.			Rates.		
	1934.	1935.	1936.	1934.	1935.	1936.
Diseases of the heart	956	1,029	1,101	16.38	17.59	18.55
Cancer and other malignant tumours	651	610	740	11.16	10.43	12.60
Tuberculosis (all forms)	281	260	235	4.82	4.44	4.00
Cerebral haemorrhage, softening, &c.	440	488	528	7.55	8.34	8.98
Pneumonia, Lobar-, Broncho-, &c.	402	390	342	6.89	6.67	5.82
Bronchitis (all forms)	86	59	74	1.47	1.01	1.26
Other diseases of respiratory system	108	113	124	1.85	1.93	2.11
Nephritis—Acute and chronic	260	274	252	4.46	4.68	4.29
Diabetes mellitus	110	88	110	1.89	1.50	1.87
Puerperal causes	61	49	51	1.05	.84	.87
Congen. debility, malformations, &c.	207	199	218	3.55	3.40	3.71
Senility	370	322	318	6.34	5.50	5.42
Suicides	78	59	69	1.34	1.01	1.17
Violent deaths (ex suicides)	294	242	271	5.04	4.14	4.61
Diarrhoea and enteritis	76	27	40	1.30	.46	.68
Whooping cough	7	23	9	.12	.39	.15
Diphtheria and croup	14	20	30	.24	.34	.51
Influenza	51	26	17	.87	.45	.29
Typhoid fever	4	5	4	.07	.09	.07
Appendicitis	44	40	34	.75	.68	.58
Hernia, intestinal obstruction	54	53	52	.92	.91	.89
Cirrhosis of liver	23	23	15	.40	.39	.25
Tetanus	13	14	11	.22	.24	.19
All other	813	750	819	13.95	12.82	13.93
Totals	5,403	5,163	5,464	92.63	88.25	93.00

Diseases of the Heart.—In practically every country in recent years a decided increase in the death-rate from cardio-vascular diseases has been observed. “Heart disease” is finding a place on death certificates with astounding frequency. Fashions in terminology and in certification are partly responsible for this. “Senility” figures less often on certificates now, and its place is taken by “arteriosclerosis and heart failure”. The statistics indicate that the number of deaths recorded as due to diseases of the heart has increased rapidly during recent years. The situation, however, is not so serious as it might appear, and presents some favourable features. One striking fact is that the population of civilised countries is ageing—people are living longer, and a far greater proportion of people of older years now exists than has ever existed before. This increased longevity is largely attributable to improved hygienic conditions. The ravages of infectious diseases are becoming less. The death-rates from typhoid fever and diphtheria are barely one twentieth of their level thirty years ago, and the tuberculosis death-rate has been more than halved. Moreover, even in diseases of the heart the death-rate in the younger age groups tends to fall, although, for all ages combined, the rate has increased. The increased death-rate from heart disease is almost a phenomenon of middle life and old age, for the senescent or arteriosclerotic type causes the bulk of the deaths. Myocardial disease of the degenerative type is replacing valvular disease of the heart as a cause of death. The fact that so great a proportion of heart disease of late life is of this senescent type is favourable, for it indicates a wearing out—a natural termination of life. As Rene Sand has said: “To die from accident, infectious disease, cancer, appendicitis, diabetes, gastric ulcer, or to die in childbirth is abnormal. To die from the progressive weakening of the heart muscle, from the gradual sclerosis of the vessels is the normal death, even if the end is marked by an episode like apoplexy or broncho-pneumonia”.

Table V. shows the numbers of deaths from certain selected causes over the past 30 years. The death-rate from cardio-vascular diseases has almost doubled in that period.

TABLE V.
Deaths in South Australia from Certain Selected Causes, during the past 30 Years.

Year.	Diseases of the Heart.	Cancer and Other Malignant Tumours.	Cerebral Haemorrhage Softening, Etc.	Puerperal Causes.	Senility.	Typhoid Fever.	Diphtheria.
1907	357	271	152	44	371	41	14
1908	347	269	198	47	337	39	12
1909	400	310	159	56	320	37	16
1910	454	322	147	51	336	25	46
1911	430	301	209	64	419	23	64
1912	469	325	223	48	443	39	57
1913	479	364	239	58	437	49	76
1914	472	370	209	62	391	57	58
1915	427	395	206	54	441	50	61
1916	516	352	223	67	490	48	139
1917	429	381	247	48	444	29	89
1918	428	379	212	47	442	10	83
1919	562	441	269	55	456	17	82
1920	554	440	278	58	470	17	87
1921	547	456	271	73	369	34	124
1922	511	482	316	50	401	19	61
1923	457	491	321	57	448	13	47
1924	527	511	253	65	422	14	28
1925	580	506	343	78	392	15	19
1926	551	530	278	51	445	8	34
1927	582	530	310	55	444	13	15
1928	609	576	319	54	398	18	15
1929	627	635	350	52	394	4	13
1930	600	594	372	50	347	7	2
1931	802	687	337	42	271	10	14
1932	857	654	337	44	311	13	11
1933	818	678	340	48	315	2	19
1934	956	651	322	61	370	4	14
1935	1,029	610	362	49	322	5	20
1936	1,101	740	383	51	318	4	30

Remarks regarding Nomenclature :—

It is to be noted that every ten years the International List of Causes of Death is revised by an International Commission, and certain alterations are made which makes strict comparison difficult.

“Diseases of the Heart”—

From 1907 to 1923 figures given for “organic diseases of heart”.

From 1924 onwards figures given for “diseases of the heart”.

“ Cerebral Haemorrhage, Softening, &c.”—

From 1907 to 1922 figures given for “ congestion, haemorrhage and softening of the brain ”.

From 1923 to 1930 figures given for “ haemorrhage, embolism and softening of the brain ”.

From 1931 to 1935 figures given for “ cerebral haemorrhage, embolism, &c.”

NOTE.—Arterio-sclerosis with cerebral-vascular lesion excluded.

“ Puerperal Causes ”—

Deaths from all puerperal conditions given.

“ Senility ”—

From 1907 to 1923 figures given for “ senile debility ”.

From 1924 to 1936 figures given for “ senility ”.

“ Typhoid Fever ”—

In 1935 figures given include deaths from “ Paratyphoid ” and “ Typhoid ”.

“ Diphtheria ”—

From 1907 to 1923 figures given include deaths from “ diphtheria and croup ”.

From 1924 onwards figures given are deaths from “ diphtheria ”.

Deaths by Violence.—The death-rate from these causes is subject to irregular fluctuations. In 1936 the number of persons meeting death by violence was 334, compared with 301 in the previous year. The Government Statist's figures are shown in Table VI.

TABLE VI.
Deaths by Violence in South Australia.

	1934.	1935.	1936.
Suicide	78	59	69
Homicide	10	4	8
Accidental burns	13	9	14
Accidental mechanical suffocation	5	3	1
Accidental drowning	29	32	35
Accidental fall	54	47	50
Automobile accidents	74	69	76
Other causes	109	78	81
Total deaths by violence	372	301	334

PART III.

SANITATION.

General Sanitation.—Although the scope of public health work has widened considerably, there is still need for continued emphasis on the extreme importance of environmental hygiene. In this State the Local Boards of Health are responsible for the detailed attention to sanitary requirements. The disposal of nightsoil and of refuse demands the greatest care and attention, especially the former in country areas where the facilities of deep-drainage do not exist.

In the metropolitan area modern works for sewage treatment are now in operation at Port Adelaide and at Glenelg. These modern methods of sewage treatment are expensive, but they provide the best known means for dealing with sewage in a clean, safe and inoffensive manner. The conversion of the Islington Sewage Farm to a modern treatment plant is contemplated. When this is accomplished the disposal methods for sewage from the metropolitan area will not be excelled anywhere in the world.

Nightsoil Disposal.—In country areas where a sufficient water supply is available, the bacteriolytic or septic tank system has proved itself as a safe and convenient disposal method. Over 17,000 of such treatment plants have been installed in this State, and over a period of 37 years the success of the method has been undoubted.

The privy pail system, with shallow burial of the material, is largely in use, and properly conducted it need give no offence. The use of unsuitable receptacles, such as kerosine tins, in place of strong pails of approved type, is to be discouraged.

Disposal of Waste Waters.—In some centres the disposal of waste waters has been a worry to Local Boards. The absorptive power of soil in many places is poor, and especially in a very wet winter there may be real difficulty. The policy of the Central Board of Health is not to permit the discharge of effluents into watercourses, and where this means of disposal has become the practice Local Boards should take steps to prohibit it.

Hygiene of Camping.—More and more people are spending holiday periods out of doors, and camping at the beaches and in the hills, and motor caravanning, are very popular recreations. Unless great care is taken in the hygiene arrangements for camping, serious health dangers may arise.

In continuation of its practice, the Central Board of Health at the beginning of the Summer inquired from various Local Boards as to the sanitation of camp sites. The Central Board urged those Local Boards in whose districts camping is conducted to have proper sanitary arrangements available and to ensure that supervision is exercised in keeping the camps clean. The return to the simple life has many advantages, but it must be recognised that from the health point of view there are very definite risks. Careful protection of foodstuffs and scrupulous care in the disposal of refuse—only by these means can safety be assured.

Rat Destruction.—In some Local Board areas increased attention has been given to the destruction of rats, and the services of a special officer have been used to assist householders and others to rid their establishments of the vermin.

Articles describing the habits of rats, and the methods of destruction, have appeared in recent issues of "Public Health Notes," the quarterly bulletin of the Health Department. The important point is that every possible means should be taken to allow no harbourages for rats to exist, and to leave no foodstuffs about for the rats. Rubbish tips, unless carefully supervised, are very liable to become breeding grounds for rats, and local authorities should be continually watchful of their refuse disposal methods.

Lead Poisoning.—Although in most countries lead poisoning has been showing a steady decline, an increase in the trouble has occasionally been observed. In the course of new manufacturing processes involving the use of lead there is always the possibility of fresh hazards arising. It was found in England a year or so ago that a number of cases were occurring in a branch of the work connected with the mass production of steel body work for motor cars. An investigation into this matter at motor body works in the Adelaide metropolitan area was recently made on behalf of the Central Board by its Senior Inspector. He found that, where a portable electric or compressed air grinding disc was used to polish soldered surfaces, the fine dust might be inhaled by the operator and by other employees in the vicinity. Unless adequate precautions were taken, lead poisoning might result. The Inspector advised suitable preventive measures. His report was adopted by the Central Board and a copy was forwarded to the Chief Inspector of Factories.

PART IV.

FOOD AND DRUGS.

The Advisory Committee under The Food and Drugs Act, 1908.—At the beginning of the year the members of the committee were Dr. A. R. Southwood, Chairman (Chairman of the Central Board of Health), Professor A. Killen Macbeth (Professor of Chemistry of the University of Adelaide), Mr. W. T. Rowe (Government Analyst), Dr. E. Angas Johnson (Officer of Health for Adelaide), and Messrs. W. M. Fowler, E. F. Lipsham and F. M. Standish (persons conversant with trade requirements).

On 6th April the Government Analyst (Mr. Rowe) commenced long leave prior to retirement. On 8th April Mr. C. E. Chapman (Acting Government Analyst) was appointed to the Committee in his stead.

Owing to the term for which the members were appointed expiring in September, the members were, under the provisions of the Act, reappointed by the Governor on 3rd September.

The Committee held four meetings. The following subjects were dealt with:—Bleaching of Flour and Improvers in Flour; Tomato Paste and Tomato Puree; Standardisation of Certain Medicinal Preparations; Fixing a Maximum Quantity of Volatile Acids that may be allowed in Wine; Protection of Food displayed for sale, particularly in Departmental Stores; Labelling of spirits; Storage of Shellfish in Port River; Revision of the Poisons Regulation; Bleaching of Tripe; Manufacture and Blending of Vinegar; and Synthetic casings as Containers for such Meats as Brawn, Fritz and Polony.

The Chief Secretary was advised of those matters in which the Committee considered that action was necessary.

Water Supply.—During 1936, the Advisory Committee on Water Supplies Examination consisted of the Engineer-in-Chief (Mr. H. T. M. Angwin) as Chairman, the Engineer for Water Supply (Mr. C. G. F. Johnson), the Chairman of the Central Board of Health (Dr. A. R. Southwood), Professor J. B. Cleland, Dr. E. Angas Johnson, and Dr. A. E. Platt (Deputy Director and Bacteriologist of the Government Laboratory, Adelaide Hospital).

Vendors of Milk.—The Central Board of Health continued to provide for the licensing of vendors of milk and the registration of their premises in the majority of the Local Board districts outside the metropolitan area. The number licensed for the year ended 30th June, 1936, was 420. In the metropolitan area, the Metropolitan County Board exercises control, licensing 1,587 vendors. Thirty-five Local Boards effecting licensing in their districts licensed 289 vendors.

Sanitary Practice in Slaughtering.—The Health Act makes it an offence to feed swine on uncooked offal. It also lays down definite requirements for sanitary conditions at slaughtering premises. From time to time action has been taken against persons for infringements of the Act in these respects. Recently a Country Local Board took legal proceedings in two such cases. In the one instance swine had been fed on uncooked offal, and in the other offensive conditions had been found to exist on slaughtering premises. In each case a substantial fine was inflicted.

Meat Supply.—In two instances it was found that butchers were killing beasts at farms of persons from whom they had been purchased and that in one case the Council had given permission for the butcher to do so under Section 552 of the Local Government Act, 1934. It was pointed out that the power to grant permission to slaughter other than at a licensed slaughterhouse was inserted in the Local Government Act to enable travelling stock to be slaughtered or stock to be slaughtered at a temporary workmen's camp, and then only for a very limited period. It cannot be too strongly stressed that any other permission granted by Councils will defeat the objects of the Act which they should jealously safeguard.

Food and Drugs Supervision.—A scheme for the economical and more efficient supervision of the purity of food and drugs on sale in the metropolitan area has been adopted by the Metropolitan County Board. A preliminary survey of the various articles of food and drugs is being made by the purchase of samples without following the procedure laid down in the Act. The samples are then submitted for analysis. Should any thus obtained fail to comply with the requirements of the Regulations the vendors are warned that the Board intends to keep the article under observation. Within two months fresh samples are procured in accordance with the procedure required by the Act, and if on analysis they are found not to conform to the standard, legal proceedings are instituted. Sometimes, however, where the circumstances seem to warrant more drastic action, other samples are procured forthwith in accordance with legal requirements, and prosecution follows a second failure. The scheme adopted allows nearly three times the number of samples formerly taken to be examined without materially increasing the work of the Inspectors.

Flour Bags.—A complaint was received regarding the use of second-hand wheat bags for holding flour. It was contended that the practice was insanitary, and that new bags should be used. Investigations into the subject showed that new bags contained a dressing which imparted a taint to flour unless the bags had previously been seasoned for a considerable time by exposure to the air. Once-used wheat sacks were found to be more suitable because they did not taint the flour and were cleaner by reason of the loose fibres being carried away when the bags were emptied of wheat. It was ascertained that before the once-used wheat sacks are used for holding flour, the bags are cleansed by being thoroughly brushed both inside and outside by a machine. Additionally, the practice is not to allow a bag with stains on it or in any way in a dirty condition to be used for flour.

PART V.

THE PREVENTION AND CONTROL OF INFECTIOUS DISEASES.

The Incidence of Infectious Diseases.—An increase in the number of cases of diphtheria, of mumps, and of typhoid fever occurred in 1936. There was an appreciable fall in the numbers of cases of influenza, of measles, and of whooping cough. The details are shown in Table VII.

Table VIII. indicates the incidence of infectious diseases in the statistical districts of the State. The areas comprised in each district were enumerated in the 1935 report of the Board.

TABLE VII.

*The numbers of cases of infectious diseases reported during 1936, and the deaths that occurred.
The cases and deaths for the preceding two years are also shown in the table.*

Infectious Diseases.	Cases Reported.			Deaths.		
	1934.	1935.	1936.	1934.	1935.	1936.
Cerebro-Spinal Meningitis	2	3	2	1	1	1
Chickenpox	1,099	1,192	1,423	—	—	—
Diphtheria	582	526	1,279	13	19	30
Dysentery—Amoebic	—	1	4	—	—	3
Dysentery—Bacillary	2	—	5	1	1	3
Encephalitis Lethargica	1	2	2	1	2	3
Endemic Typhus Fever	8	14	13	—	1	3
Erysipelas.....	183	95	121	3	6	6
Favus	—	3	—	—	—	—
Influenza	1,280	705	135	57	25	14
Malaria	3	2	—	—	—	—
Measles	1,249	454	88	7	—	—
Mumps	27	84	198	—	—	—
Paratyphoid Fever	—	2	1	—	—	—
Poliomyelitis Anterior Acuta	4	18	5	1	2	—
Puerperal Fever	43	46	89	12	8	9
Pulmonary Tuberculosis	370	318	266	242	233	199
Scarlet Fever	643	461	397	1	—	1
Typhoid Fever.....	20	29	51	2	5	3
Whooping Cough.....	1,313	3,616	751	6	25	9

TABLE VIII.

Divisional Totals of Cases and Deaths reported during 1936.

Infectious Diseases.	Division I. Metro- politan.		Division II. Central.		Division III. Lower North.		Division IV. Upper North.		Division V. South- Eastern.		Division VI. Western.		Division VII. Murray Mallee.		Total State.	
	Cases.	Dths.	Cases.	Dths.	Cases.	Dths.	Cases.	Dths.	Cases.	Dths.	Cases.	Dths.	Cases.	Dths.	Cases.	Dths.
Cerebro-Spinal Meningitis	2	1	—	—	—	—	—	—	—	—	—	—	—	—	2	1
Chickenpox	885	—	303	—	155	—	16	—	3	—	17	—	44	—	1,423	—
Diphtheria	941	22	65	1	157	5	42	—	9	—	52	2	13	—	1,279	30
Dysentery, Amoebic	3	3	—	—	1	—	—	—	—	—	—	—	—	—	4	3
Dysentery, Bacillary	5	1	—	2	—	—	—	—	—	—	—	—	—	—	5	3
Encephalitis Lethargica	—	2	1	—	1	1	—	—	—	—	—	—	—	—	2	3
Endemic Typhus Fever	9	2	—	—	1	—	—	—	—	—	3	1	—	—	13	3
Erysipelas	88	3	18	—	6	—	4	1	—	—	1	—	4	2	121	6
Influenza	8	5	14	—	38	4	2	2	4	1	58	1	11	1	135	14
Measles	31	—	9	—	11	—	2	—	1	—	3	—	31	—	88	—
Mumps	183	—	6	—	—	—	—	—	1	—	6	—	2	—	198	—
Paratyphoid Fever	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—
Poliomyelitis Anterior Acuta	3	—	—	—	1	—	—	—	—	—	1	—	—	—	5	—
Puerperal Fever	78	5	3	1	1	3	3	—	—	—	3	—	1	—	89	9
Pulmonary Tuberculosis	205	170	17	8	12	9	6	3	7	2	7	5	12	2	266	199
Scarlet Fever	192	—	102	—	32	—	24	—	9	—	22	1	16	—	397	1
Typhoid Fever	31	2	6	1	6	—	6	—	—	—	—	—	2	—	51	3
Whooping Cough	244	5	111	1	190	—	110	1	65	1	6	1	25	—	751	9

Diphtheria.—A considerable increase in the incidence of diphtheria occurred, the number reported being 1,279 compared with 526 for the previous year. It was also the highest since 1922 when 1,502 cases were reported. The numbers of deaths from diphtheria for each of the past 30 years are shown in Table V. of this report. In two country outbreaks special inquiries were made by the Central Board of Health, one at Wallaroo, and the other at Whyalla, which is outside the boundaries of any Local Board of Health. In the latter instance, when the nearest public hospital could not take any more cases, a temporary hospital was established by the Broken Hill Proprietary Ltd. A survey of the housing conditions in this area showed a lack of adequate accommodation. In both areas immunization against diphtheria was being carried out concurrently with the occurrence of cases. The increased incidence generally throughout the State gave a decided stimulus to Local Boards of Health to provide for diphtheria immunization campaigns in their districts.

Diphtheria Immunization.—The response to the scheme for the free supply of anatoxin for diphtheria immunization referred to in the previous report was greater than anticipated, chiefly due to the greater incidence of the disease during the early part of the year. Forty-eight Local Boards carried out campaigns in their districts, and five Institutions had the children under their charge treated. All records for campaigns have not yet been received, but it is estimated that over 16,000 children were treated with formalinized toxoid (anatoxin) by official agencies, in 1936. In addition, large numbers of children received protective injections from private medical practitioners; no records of this group are available.

The work conducted by the Local Board of Health for the Town of Hindmarsh, under the direction of the Officer of Health (Dr. J. M. Dwyer), was particularly outstanding. A full report of the Hindmarsh campaign has been published in the "Medical Journal of Australia".

The interest taken in immunization by Local Boards in the Western Division of the State (Eyre's Peninsula) was also noteworthy. Campaigns were conducted in eight of the ten Local Board districts, and in four out-districts.

To be effective as a public health measure, diphtheria immunization should be continued as an annual activity of Local Boards, so that fresh batches of young children may be protected. Many Local Boards are continuing the work during 1937.

Typhoid Fever.—Table V. shows the numbers of deaths from typhoid fever since 1907. Forty-seven cases of typhoid fever were reported during 1936 compared with twenty-nine cases the previous year. Seven cases occurred at a camp established near Stirling North in connection with the construction of the Commonwealth Railway Line.

The majority of the cases, however, were a continuance of the outbreak in December, 1935. During the three months' period, December, 1935, to February, 1936, thirty cases of typhoid fever occurred in two of the western Suburbs of Adelaide. There were two deaths. An inquiry was instituted by the Central Board of Health and was conducted by the Chairman of the Board. The first case notified was a girl of 15 years living at a dairy conducted by her father. Altogether five of the six persons living at the dairy contracted the disease. The inquiry failed to establish the origin of the first case. Infection in the other persons was attributed to contact with infected articles at the residence on the dairy premises, or to the drinking of milk obtained from the dairy. The possibility of sewage-contaminated vegetables having caused the infection in the first case was reviewed. It was found that vegetables were being grown on a small area at the Sewage Farm, and that untreated sewage was being used for irrigation of the plots. This practice has now been prohibited. Some years ago it was decided to introduce a modern sewage

treatment process at Islington, near Adelaide. The methods of contact aeration followed by the activated sludge process adopted at Port Adelaide and of the activated sludge process adopted at Glenelg provide for the safe and effective treatment of much of the sewage from the metropolitan area ; when the Islington plant is established practically the whole of the sewage from that area will be dealt with on modern lines.

The typhoid outbreak was promptly controlled. The dairy was closed, and the effective co-operation of private medical practitioners and of health authorities was a big factor in limiting the spread of the infection. The occurrence of the outbreak has shown the need for the careful conduct of food premises, and for the continued watchfulness of health authorities.

The Chairman's report on the typhoid fever outbreak embraced a survey of the methods of milk production and distribution, and of sewage disposal methods. Appropriate recommendations on these and cognate matters were made, and the report was transmitted to the Government and to the Local Boards concerned by the Central Board.

Psittacosis.—Although psittacosis (" the parrot disease ") is not notifiable in South Australia, medical practitioners have been asked to acquaint the Central Board of Health of any cases, or suspected cases, coming to their notice. A detailed report of a suspected case has been published in the January, 1937, issue of " Public Health Notes ". Clinically the case was highly suspicious, but conclusive laboratory evidence was not forthcoming. The laboratory investigation of *psittacosis* is, however, a matter of extreme difficulty.

Undulant Fever.—Reference to this disease was made in our Annual Report for 1933. A valuable article on the subject was contributed to " Public Health Notes " by Mr. C. A. Loxton, Chief Inspector of Stock. Occasional cases occur in this State from time to time. The disease in human subjects is not notifiable, but medical practitioners have been requested to inform the Central Board of cases coming to their notice. The public health aspects of the disease are important, and are being watched carefully.

Emergency Hospital Accommodation.—The question of hospital accommodation in the event of an extensive outbreak of infectious disease received consideration. Information was sought from the various local authorities concerned as to the most suitable buildings that could be used as hospitals, with the view to tabulating the suitability or otherwise of the buildings so that, in case of an emergency, there would not be any lack of accommodation.

PART VI.

THE PREVENTION AND CONTROL OF PULMONARY TUBERCULOSIS.

An Important Problem.—Tuberculosis is the most serious of the infectious diseases confronting civilised communities today. Its widespread incidence, its chronic character, and its proneness to attack and destroy young adults make it a problem of the utmost importance. The high community-value of its victims, mostly in the prime of life, makes it a serious matter from the purely economic standpoint. Indeed from this point of view, even cancer is less important than tuberculosis, for cancer selects for its onslaughts people of older age-groups. In Australia each year tuberculosis kills 3,000 people, two-thirds of them under the age of 45. Cancer annually kills 6,000 Australians, but two-thirds of these are over 60 years of age.

Until recent years the world as a whole appeared to have become resigned to the presence of tuberculosis or to have regarded it with the indifference bred of long and intimate association. Even now the efforts to abolish the disease are not being pursued as vigorously as they ought to be. This is the more surprising when it is remembered that the nature and manner of spread of tuberculosis is now well-known. Science has done its part in elucidating the nature of the disease ; it remains for communities to apply the knowledge in a vigorous manner.

Yet it must be admitted that the application of our scientific knowledge to eradicate tuberculosis is not altogether an easy matter. There is no simple drug cure for tuberculosis in the human subject as there is for syphilis. The eradication of the disease, according to present knowledge, depends not on drugs, but on the adoption by the community of a definite and comprehensive plan of attack. Nor is the problem solely a medical one. Indeed, it is largely one of economics and sociology.

The Falling Death-rate from Tuberculosis.—It is gratifying, however, to note that a steady fall in the death-rate from tuberculosis is occurring in this State. In the Board's Annual Report for 1935, the statistics showing the numbers of cases of pulmonary tuberculosis reported to Local Boards and the numbers of deaths were published. The figures covered the annual returns since 1899, when pulmonary tuberculosis was declared a notifiable disease in this State. Reference to that table shows that the actual number of deaths each year has fallen by approximately 25%, and that during a time when the State's population has almost doubled. Table IX. shows the numbers of cases reported, and of deaths, in recent years.

TABLE IX.

Numbers of cases of pulmonary tuberculosis notified and numbers of deaths recorded.

Years.	Cases Reported.	Deaths.
Average for the period, 1901-1905	341	300
Average for the period, 1906-1910	427	331
Average for the period, 1911-1915	476	317
Average for the period, 1916-1920	534	344
Average for the period, 1921-1925	513	332
Average for the period, 1926-1930	461	306
Average for the period, 1931-1935	363	252
1936.....	266	199

Remarkable Improvement in South Australia.—Table X. shows that the pulmonary form of tuberculosis accounts for approximately 90% of the deaths from all forms of tuberculosis. Thirty years ago pulmonary tuberculosis was responsible for over 10% of deaths from all causes in this State ; in 1936 it accounted for less than 4% of total deaths.

TABLE X.

Deaths which occurred in South Australia from pulmonary tuberculosis, from tuberculosis (all forms), from all notifiable diseases (other than pulmonary tuberculosis), and from all causes during the years 1927-1936 (inc.)

Year.	Pulmonary Tuberculosis.	Tuberculosis (all forms).	All Notifiable Diseases (other than Pulmonary Tuberculosis).	All Causes.
1927	335	362	128	5,128
1928	291	341	111	5,147
1929	302	343	86	5,039
1930	256	292	121	4,851
1931	291	332	111	4,888
1932	238	275	66	4,957
1933	257	303	97	4,904
1934	242	281	105	5,403
1935	233	260	97	5,163
1936	199	235	85	5,464

In practically all countries where proper records are kept the phenomenon of a falling tuberculosis death rate has been noted. In England in the last thirty years the death-rate from all forms of the disease has fallen from 150 per 100,000 population to 72 (in 1935). In the Commonwealth of Australia the rate was 92 in 1907 ; it had fallen to 42 in 1935. Table XI. shows the death-rate in the various Australian States during recent years. Thirty years ago South Australia showed the next highest death-rate of all the States. The position has now improved. The death-rate from pulmonary tuberculosis is in this State less than half its level around 1905. All States show some improvement, but the percentage gain during the last thirty years is greatest in South Australia.

TABLE XI.

Death-rates in the several States from Tuberculosis of the Respiratory System per 100,000 population. (The figure shown is the nearest whole number.)

Years.	South Australia.	New South Wales.	Victoria.	Queens-land.	Western Australia.	Tasmania.
Average 5-year period, 1908-1912 (inclusive)	82	64	83	55	74	66
1930.....	44	41	50	37	52	51
1931.....	50	40	55	34	58	56
1932.....	40	38	45	34	48	48
1933.....	45	37	41	35	47	49
1934.....	43	36	41	33	49	41
1935.....	39	35	41	32	47	46

Causes of the Improvement.—The reasons for the gain in this State are probably many. Public education in health matters has steadily improved, and a better state of communal and personal hygiene has been attained. The work of Local Boards of Health, in supervising the home conditions of tuberculous subjects, is a valuable aid, and some of the progress now recorded may be fairly attributed to these activities.

Appendix A of this report describes the instructions issued by the Central Board to Local Boards. Appendix B. outlines the information compiled by the inspecting officer of the Local Board.

Prospects of Further Gain.—Steady work on the lines now followed will effect further gains. The need for early diagnosis of the disease and the prompt treatment of sufferers are features now being realised by the general public.

Tuberculosis is gradually being conquered, but continued war against our retreating foe is essential if we are to be assured of complete victory.

The Chairman of the Central Board of Health concluded a recent address in these terms: "The cost of this war on tuberculosis is very great. Much money is necessary, and much bother is involved. The demands of a whole-hearted warfare are exacting. Our best experts in medicine, in economics and sociology must be engaged to direct the forces. As in wars of destruction, so in this war of construction, the whole community must bear the expense.

"In Australia we are more favourably placed for launching an all-front attack against tuberculosis than are most other people. The incidence of the disease and the mortality rate are already lower than in other countries. Our climatic conditions are excellent. The general health of our people is relatively good. We are unhampered by a mixed population with varying hygienic standards. We have efficient quarantine arrangements. We can submit to the discipline of good government.

"Surely the possibilities are great. With our present knowledge, properly applied, the disease could be stamped out of Australia within fifty years. The question no longer is 'Can tuberculosis be conquered?' but rather 'Will it be? And when? And where?' It is Australia's opportunity to make world-history against 'the white scourge'. Can we rise to the great occasion?"

If the rate of progress now shown in gaining supremacy over tuberculosis in this State continues at the same pace, the grave features of the disease as a public health problem will speedily vanish. Meanwhile, there is need for continued activity on the part of health authorities. The great improvement already won must serve to stimulate all concerned to still greater efforts.

PART VII.

OBSERVATIONS.

1. The report indicates a satisfactory condition of the public health of the State, according to modern standards.

2. Year by year, the widening scope of public health work is becoming more striking. The health of every individual person determines the health of a community, and so becomes the care of official health bodies.

3. The work of Local Boards is, in many cases, carried out with enthusiasm and efficiency. In some instances there has appeared to be a lack of interest on the part of Local Boards in the work, and a failure to appreciate the importance of meticulous care in every detail of its performance. The Central Board endeavours to guide and assist Local Boards in every way possible. The quarterly bulletin, "Public Health Notes", serves as a vehicle for the dissemination of information on diverse health topics.

4. The statistical returns show a steady increase in deaths from diseases of the heart. The community aspects of this matter have been discussed in the report.

5. General environmental sanitation demands continued watchfulness. In country districts the proper disposal of refuse and of nightsoil are matters of the greatest importance.

6. The occurrence of an outbreak of typhoid fever in portion of the metropolitan area has served to show that, although such outbreaks are fortunately rare, it is only by constant care that freedom from them can be assured.

7. Diphtheria immunization has been conducted extensively in most parts of the State.

8. The remarkable improvement in the tuberculosis death-rate is fully reviewed in the report. Continued and extended application of the methods now available to deal with the disease promises to give still further improvement in the succeeding years.

9. It is gratifying to be able to record that the infantile death-rate for the year was 31.09 per 1,000 births. This is believed to be a world record.

A. R. SOUTHWOOD, Chairman.

E. ANGAS JOHNSON,	} Members.
J. B. CLELAND,	
H. S. HATWELL,	
F. C. LLOYD,	

S. C. STENNING, Secretary.

Adelaide, March 30th, 1937.

APPENDICES.

APPENDIX A.

THE CONTROL OF PULMONARY TUBERCULOSIS.

INSTRUCTIONS ISSUED BY THE CENTRAL BOARD OF HEALTH FOR THE GUIDANCE OF LOCAL BOARDS.

1. On receiving from a medical practitioner the report that a person residing in the district is suffering from pulmonary tuberculosis, the Local Board of Health should at once—
- (a) notify its Officer of Health.
 - (b) notify the Central Board of Health.
 - (c) instruct its Officer of Health or Nurse Inspector to visit the premises, and to take the action outlined in paragraph 2 (below).
2. The Officer of Health, or the Nurse-Inspector, should visit the premises where the patient resides, and—
- (a) obtain the information required for the Inquiry Card.
 - (b) satisfy himself (or herself) that proper precautions are being observed to prevent spread of infection, and investigate sanitary condition of premises.
 - (c) if necessary, advise the patient and/or householder regarding sanitary measures and disinfection or other precautions.
 - (d) leave with some responsible person a copy of the leaflet on “ Pulmonary Tuberculosis ” issued by the Central Board.
 - (e) report to the Local Board on the action taken, and deliver the completed Inquiry Card for filing in the office of the Local Board.
3. The premises occupied by the patient should be visited regularly by the Officer of Health or Nurse Inspector at least once each month, to ensure continued compliance with instructions given at the initial visit. If, at any time, the patient proposes to move to another residence the fact should be reported to the Local Board, and the new address noted.
4. The Officer of Health of the Local Board should confer with the patient’s medical attendant on any special matter he considers necessary, such as obvious or suspected non-observance of precautions, or the desirability of sending the patient to a hospital or sanatorium.
5. The completed Inquiry Card should be filed in the office of the Local Board, and a duplicate sent to the Central Board.
6. When a patient moves his place of residence to another district, the Local Board previously supervising the home should advise the other Local Board concerned of the transfer and the new address.

APPENDIX B.

INQUIRY CARD : PULMONARY TUBERCULOSIS.

A copy of the completed card is to be filed in the office of the Local Board of Health, and a duplicate copy immediately sent to the Secretary, Central Board of Health, Adelaide.

Local Board.....	No.....
Name.....	Age..... Sex.....
Address	
Date notified.....	T.B. in sputum : Yes. No.
Notified by Dr.....	How long ill.....
Subsequent alterations of address, with dates	
.....	
.....	
Married, Single, Widow(er)..... General condition (well-to-do, badly-off)	
.....	
Occupation.....	For how long.....years
Any previous occupations	
Exposed to infection : Home ? Work ? Friends ?	
Present condition : Able to work, to walk about, confined to bed.....	
Sputum : amount..... How disposed of	
Previous serious illnesses of patient	
.....	
Previous serious illnesses in family	
.....	
Deaths in family	
.....	
(Give causes.)	

INQUIRY CARD—*continued.*

Dwelling : Rooms..... Clean, dry, airy
Sanitary condition
.....
Patient sleeps : In room, in sleep-out
 Alone in room, alone in bed

Inmates of household : Name, age, relationship to patient, state of health, school
.....
.....
.....
.....
.....
.....

SPECIAL COMMENTS—

.....*Visiting Officer.*
.....*Officer of Health.*
Date.....

Subsequent Visits by Officer of Health or Nurse-Inspector.

Date of Visit.	Remarks.	Initials of Visiting Officer.
.....		
.....		
.....		
.....		

Entries will be made on the Card as required, and the Card kept filed in the Local Board Office.